

CLAIMS

What is claimed is:

- 5 1. An embedded centrifugal cooling device, comprising:
a heat sink, including cavity; and
a centrifugal fan, formed in said cavity.
- 10 2. The embedded centrifugal cooling device according to claim
1, wherein said heat sink further comprises a plurality of
cooling fins defining said cavity.
- 15 3. The embedded centrifugal cooling device according to claim
2, wherein said cooling fins are distributed under and around
a region extending from a central region of said centrifugal
fan to a periphery of said centrifugal fan.
- 20 4. The embedded centrifugal cooling device according to claim
1, further comprises a cover formed on said heat sink and
said centrifugal fan.
5. The embedded centrifugal cooling device according to claim
4, wherein said cover serves as an air seal to keep airtight.
- 25 6. The embedded centrifugal cooling device according to claim
1, wherein said cavity matches said centrifugal fan.
7. The embedded centrifugal cooling device according to claim
1, wherein said heat sink is made of a material chosen from

the group consisting of aluminum, aluminum alloy, copper, copper alloy and the combination thereof.

8. An embedded centrifugal cooling device, comprising:

5 a heat sink, including a plurality of cooling fins, said cooling fins defining a cavity; and

a centrifugal fan, formed in said cavity so as to be embedded into said heat sink.

10 9. The embedded centrifugal cooling device according to claim 8, further comprises a cover formed on said heat sink and said centrifugal fan.

15 10. The embedded centrifugal cooling device according to claim 8, wherein said cover serves an air seal to keep airtight.

11. The embedded centrifugal cooling device according to claim 8, wherein said cavity matches said centrifugal fan.

20 12. The embedded centrifugal cooling device according to claim 8, wherein said cooling fins are distributed under and around a region extending from a central region of said centrifugal fan to a periphery of said centrifugal fan.

25 13. The embedded centrifugal cooling device according to claim 8, wherein said heat sink is made of a material chosen from the group consisting of aluminum, aluminum alloy, copper, copper alloy and the combination thereof.

14. An embedded centrifugal cooling device, comprising:
a heat sink, including a plurality of cooling fins, said
cooling fins defining a cavity;
a centrifugal fan, formed in said cavity so as to be embedded
5 into said heat sink; and
a cover formed on said heat sink and said centrifugal fan.

15. The embedded centrifugal cooling device according to claim
14, wherein said cover serves as an air seal to keep airtight.

16. The embedded centrifugal cooling device according to claim
14, wherein said cavity matches said centrifugal fan.

17. The embedded centrifugal cooling device according to claim
15 14, wherein said cooling fins are distributed under and
around a region extending from a central region of said
centrifugal fan to a periphery of said centrifugal fan.

18. The embedded centrifugal cooling device according to claim
20 14, wherein said heat sink is made of a material chosen from
the group consisting of aluminum, aluminum alloy, copper,
copper alloy and the combination thereof.